UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/963,401	09/27/2001	Pablo Tamayo	19111.0049	9029

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EXAMINER
AMSBURY, WAYNE P

ART UNIT	PAPER NUMBER
2171	6

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	**Application N**. 09/963,401	**Applicant(s)** TAMAYO ET AL.
	Examiner Wayne Amsbury	**Art Unit** 2171

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _24 June 2003_ .

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-48_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-48_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on _27 September 2001_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _5_ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

CLAIMS 1-48 ARE PENDING

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-2, 5-8, 11-12, 14-18, 21-22, 25-28 and 39-48 are rejected under 35

U.S.C. 112, second paragraph, as being incomplete for omitting essential structural

cooperative relationships of elements, such omission amounting to a gap between the

necessary structural connections. See MPEP § 2172.01. The omitted structural

cooperative relationships are:

In claim 1 the nexus between "web" and "data" mining; and the nexus between

"generating a prediction or recommendation..." and the other elements of the claim. This

lack is not repaired by claim 2 or claims 5-7. This analysis applies as well to claims 11-

12 and 15-17 and also claims 21-22 and 25-27.

The phrase: "the step of generation an online prediction" in claims 8, 18 and 28

does not have a proper antecedent because there is no such step in claims 7, 17 and

27.

The phrase "selected data" in claim 39 does not have a proper antecedent, and

claims 40-48 do not repair this defect. It is further noted that all of the steps of claim 31

on which these claims depend involve pre-processing prior to further processing, and

thus it is not clear that 39 is a further limitation of claim 31.

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-2 and 5-7 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As noted above, the body of independent claim 1 is not web-related. The term "data mining" is commonly associated with computer implementations, but Web use is not inherent in the term. Thus the claims are not confined within the technological arts, they are concepts or abstractions, as opposed to computer-implemented mining.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 5-7, 11-12, 15-17, 21-22, 25-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Simoudis et al (Simoudis), US 5,692,107, 25 November 1997. [IDS paper #5.]

Simoudis is directed to the generation of predictive models by data mining [TITLE, ABSTRACT, SUMMARY]. To the extent that FIG 2 (or FIG 3) is not a clear anticipation of at least claim 1, the teachings of Simoudis are set forth as follows:

As to **claim 1**, "collecting data from a plurality of data sources" corresponds to **200**; at least "integrating the collected data" corresponds to at **202-204**; at least "generating a plurality of data mining models using the collected data" corresponds to steps **205-209**. As to "generating a prediction or recommendation in response to a received request for a recommendation or prediction" is clearly the purpose of creating and saving predictive models, but is made explicit in FIG 3 and its discussion.

As to **claim 2**, see FIG 4, where the user interacts with the system within the collecting step. As to **claim 5**, it is clear that the tables generated and selected in Simoudis are in a coherent format by reason of being in a database.

As to **claim 6**, see steps **203-206** of FIG 2. As to **claim 7**, clearly Simoudis is implemented in program code.

The elements of **claims 11-12, 15-17, 21-22, 25-27** are rejected in the analysis above, and these claims are rejected on that basis.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

Claims 3-4, 8-10, 13-14, 18-20, 23-24, 28-30, 31-32, and 33-48 are rejected

under 35 U.S.C. 103(a) as being unpatentable over Simoudis et al (Simoudis), US

5,692,107, 25 November 1997 in light of Cooley et al (Cooley), Web Mining etc.,

1997 IEEE. [IDS paper #5.]

Simoudis does not address web mining per se, although it falls within the scope

of data mining within networks accessed by a GUI as taught by Simoudis [SUMMARY;

COL 2 lines 6-15, COL 3 lines 4-14, line 62 and after, and elsewhere]. Cooley is

directed to this particular form of data mining [ABSTRACT]. It would have been obvious

to one of ordinary skill in the art at the time of the invention to provide for the Web as a

data mining source because of the explosive growth of information sources available on

the Web [Cooley page 558, Introduction].

The instant claims differ from those rejected above in that they are explicit about

the use of the Web. The other elements of these claims have been rejected above and

are rejected on that basis.

As to **claims 3-4**, Simoudis is directed to collecting data from a variety of data

sources, including those managed by a DBMS, and sources such as a spreadsheet

[COL 4 lines 16-42]. The use of complementary data in Simoudis is discussed at length,

as at COL 1 lines 42-63. Cooley is also directed at integrating data from disparate sources [page 558 RHC], including transactions from usage data and other data that is clearly within the purview of web server data.

As to **claim 8**, Cooley is directed to developing models [**3. pattern discovery**, p. 560], and scoring of information and associations [p. 561-562], but does not explicitly state this as "scoring of models." It is considered that the examples cited correspond to models and/or model components.

As to **claim 9**, Cooley addresses data cleaning [p. 560 **3.1**].

The elements of **claims 10, 13-14, 18-20, 23-24, 28-30, and 33-48** are rejected in the analysis above and these claims are rejected on that basis.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wayne Amsbury whose telephone number is 703-305-3828. The examiner can normally be reached on M-TH 7-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 703-308-1436. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-9700.

WPA

WAYNE AMSBURY
PRIMARY PATENT EXAMINER